AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-33 (cancelled).

34 (currently amended). A carbonylation process for the production of a carbonylation product ~~by~~, comprising contacting carbon monoxide with a feed comprising an alcohol and/or a reactive derivative thereof in the vapour phase using an heterogeneous heteropolyacid catalyst comprising one or more metal cations selected from Cu, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd and Pt, ~~characterized in that~~ wherein there is also present in the feed at least 0.5wt% water.

35 (previously presented). Process according to claim 34 wherein the feed comprises at least 1 wt% water.

36 (currently amended). A process according to claim 34 wherein the feed comprises up to 20 wt% water.

37 (previously presented). A process according to claim 34 wherein the feed comprises 5 to 15wt% water.

38 (previously presented). A process according to claim 34 wherein the water in the feed is fresh and/or recycle water.

39 (previously presented). A process according to claim 34 wherein the heteropolyacid comprises 1 to 6 wt% metal cation(s).

40 (previously presented). A process according to claim 34 wherein the heteropolyacid catalyst comprises a metal cation selected from rhodium, iridium and copper.

41 (previously presented). A process according to claim 40 wherein the metal cation is rhodium.

42 (previously presented). A process according to claim 34 wherein the heteropolyacid comprises a peripheral atom selected from the group consisting of molybdenum, tungsten, vanadium, niobium, chromium and tantalum and a central atom selected from silicon and phosphorus.

43 (previously presented). A process according to claim 34 wherein the heteropolyacid is selected from the group consisting of substituted silicotungstic acids, silicomolybdic acids, phosphotungstic acids and phosphomolybdic acids.

44 (previously presented). A process according to claim 34 wherein the heteropolyacid comprises one or more further cations selected from residual hydrogen ions and alkali metal cations.

45 (previously presented). A process according to claim 34 wherein the heteropolyacid catalyst is supported on a support.

46 (previously presented). A process according to claim 45 wherein the support is selected from an oxide support and a non-oxide support.

47 (previously presented). A process according to claim 46 wherein the oxide support is selected from the group consisting of silica, alumina, silica-aluminas, zeolites, clays, diatomaceous earths and titania.

48 (currently amended). A process according to claim ~~47~~ 46 wherein the non-oxide support is selected from the group consisting of silicon carbide, carbons and organic polymers.

49 (currently amended). A process according to claim ~~48~~ 45 wherein the heteropolyacid comprises 20 to 70% by weight based on the total weight of heteropolyacid and support.

50 (previously presented). A process according to claim 34 wherein the alcohol is a C_1 to C_{12} aliphatic alcohol.

51 (previously presented). A process according to claim 50 wherein the alcohol is selected from methanol, ethanol, propanol, isopropanol, the butanols, the pentanols and the hexanols.

52 (previously presented). A process according to claim 34 wherein the reactive derivative of the alcohols is selected from at least one of a dialkyl ether, an ester of the alcohol and an alkyl halide.

53 (previously presented). A process according to claim 52 wherein the reactive derivative is selected from at least one of methyl acetate, dimethyl ether and methyl iodide.

54 (previously presented). A process according to claim 34 wherein the feed comprises an alcohol and a reactive derivative thereof.

55 (previously presented). A process according to claim 54 wherein the reactive derivative is an ether or an ester of the alcohol.

56 (previously presented). A process according to claim 55 wherein the ether and/or the ester is present in an amount up to equimolar to the amount of water in the feed.

57 (previously presented). A process according to claim 34 wherein the carbonylation product is selected from at least one of a carboxylic and a carboxylic acid ester.

58 (previously presented). A process according to claim 57 wherein the carbonylation product is selected from at least one of acetic acid and methyl acetate.

59 (previously presented). A process according to claim 34 wherein the carbon monoxide to alcohol molar ratio is in the range 5: 1 to 15 : 1.

60 (previously presented). A process according to claim 34 wherein the feed also comprises hydrogen.

61 (previously presented). A process according to claim 60 wherein the hydrogen to carbon monoxide molar ratio is in the range 1 : 20 to 20 : 1.

62 (previously presented). A process according to claim 34 wherein the carbon monoxide is used in the form of synthesis gas.

63 (previously presented). A process according to claim 34 wherein the process is carried out at a temperature in the range 100 to 300 °C.

64 (previously presented). A process according to claim 34 wherein the process is carried out at a pressure in the range 1 to 100 barg.

65 (previously presented). A process according to claim 34 wherein the gas hourly space velocity is in the range 100 to 10000 h^{-1}.

66 (previously presented). A process according to claim 34 wherein the process is carried out as a continuous process.

67 (previously presented). A process according to claim 34 wherein the feed comprises at least 2 wt% water.

68 (previously presented). A process according to claim 34 wherein the feed comprises at least 5 wt% water.

69 (previously presented). A process according to claim 34 wherein the feed comprises up to 15 wt% water.

70 (previously presented). A carbonylation process for the production of a carbonylation product by contacting carbon monoxide with a feed comprising methanol

in the vapour phase using a heterogeneous heteropolyacid catalyst comprising one or more metal cations selected from rhodium, iridium and copper, characterized in that there is also present in the feed 5 to 15 wt% water.